## LACE BUG GENUS ACALYPTA IN MEXICO: KEY AND NEW SPECIES A. LAURAE (HETEROPTERA: TINGIDAE)<sup>1</sup>

### Richard C. Froeschner<sup>2</sup>

ABSTRACT: The new species A. laurae is described and illustrated from a specimen intercepted on Tillandsia inonantha being imported into the United States from Mexico. The three known Mexican species of Acalypta, each based on a single specimen without further locality information, are keyed.

The holarctic genus Acalypta Westwood contains 40 species of which 13, including the present new one, occur in the Western Hemisphere. The two most recent comprehensive treatments of the New World species of Acalypta were by Drake and Lattin (1963) who treated 10 species and by Froeschner (1976) who added the eleventh species along with zoogeographic notes; subsequently a twelfth, species, A. susanae, was described from Arkansas by Allen et al. (1988). At this time ten of the New World species of Acalypta are known from north of the Rio Grande River and three other species, including the present new one, are known only from Mexico.

The single specimen of the present new species was intercepted on *Tillandsia inonantha* Planchon (family Bromeliaceae) being imported into the United States from Mexico. In the light of Drake and Lattin's (1963:334) comment that members of *Acalypta* are primarily muscicolous but may use other plants in the absence of suitable mosses, this specimen may have come from a moss used as packing for the flowering plant.

All three Mexican species of *Acalypta* are based on unique, brachypterous, and otherwise unlocalized type specimens intercepted on plants being imported into the United States from that country. Collectors in Mexico are urged to attempt to determine their ranges more precisely.

# Acalypta laurae new species

Figure 1

Diagnosis: Known only from one brachypterous female, this species may be differentiated from all other members of this genus in the New World by the following combination of characters: Pronotum unicar-

Received December 27, 1990. Accepted April 20, 1991.

<sup>&</sup>lt;sup>2</sup>Department of Entomology NHB-127, United States National Museum of Natural History, Washington, D.C. 20560

inate; head with a pair of long, separated frontal spines; and hypocosta uniseriate.

In Drake and Lattin's (1963:335-336) "Key to the Brachypterous Forms of American Acalypta," A. laurae runs to A. mniophila Drake and Ruhoff but can be distinguished therefrom by possession of a pair of long, frontal spines. In Froeschner's (1976:267) key to the Acalypta known from Mexico, it runs to A. ruhoffae Froeschner but can be separated by any one of the following characters: the presence of long, well separated frontal spines; the wholly uniseriate hypocostal lamina; or the unicolored dark veins of the hemelytra.

Description: Measurements in millimeters. Brachypterous female holotype. Broadly ovate, widest slightly posterior to midlength. Color dark fuscous brown; veins separating discoidal and corial areas concolorous with veins within those areas. Ventrally dark with bucculae, base of hemelytron, and margins of coxal cavities noticeably paler.

Head with frontal spines long, diverging, slightly surpassing apex. Bucculae anteriorly distinctly incurved, not contiguous. Antennophore straight, blunt, attaining midlength of antennal segment I. Antennal segmental proportions, I-IV, 0.11: 0.08: 0.39: 0.17; segment

III slender, noticeably wider on basal sixth.

Pronotum with weakly tectate, bluntly triangular, anteromedian projection above head; paranotum almost twice as wide as an eye, triseriate, lateral margin convex; median carina irregularly uniseriate in middle third, then lower toward each end; lateral carinae absent.

Costal area cells prominent, mostly quadrate, uniseriate except for one or two divided cells at base and near apical fourth; outer limiting veins of discoidal areas coarctate in basal third, in lateral view strongly elevated and convex along anterior two-thirds; inner limiting vein of discoidal area becoming evanescent basally. Hypocostal lamina uniseriate. Length 2.07.

Holotype: Brachypterous female, "intercepted on leaf of *Tillandsia ionantha* from Mexico; Tex., Brownsville, Feb. 19, 1988, D. Riley." Deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C.

The name of this species dedicates it to Ms. Laura Torres Miller whose dissertation formed the basis for the revision of Mexican tingid genera by Brailovsky and Torres (1986).

## Key to brachypterous Mexican Acalypta

|    | Head with a pair of long frontal spines exceeding apex of head. Paranotum with 3 rows of cells  |
|----|---|
|    | Head without prominent frontal spines. Paranotum with 2 rows of cells   |
| 2. | Frontal spines distinctly separated. Hypocosta wholly uniseriate. Outer limiting veins of discoidal area concolorous with veins in discoidal and subcostal areas                          |
|    | Frontal spines virtually contiguous for full length. Hypocosta biseriate basally. Outer limiting veins of discoidal area conspicuously darker than veins in discoidal and subcostal areas |
|    |   |

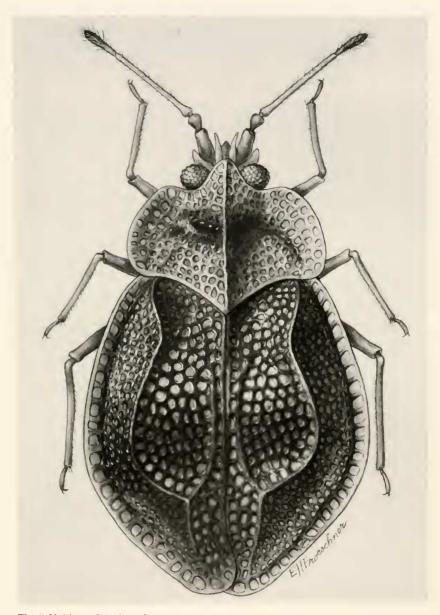


Fig. 1. Habitus of Acalypta laurae, n. sp.

#### **ACKNOWLEDGMENTS**

Special thanks are due to Elsie H. Froeschner for the fine halftone habitus drawing, to Thomas J. Henry, U.S. Department of Agriculture, Systematic Entomology Laboratory, and Oliver S. Flint, Jr., National Museum of Natural History for reviewing the manuscript and making helpful suggestions.

#### LITERATURE CITED

Allen, R.T., C.E. Carlton, and S.A. Tedder. 1988. A new species of *Acalypta* (Hemiptera, Tingidae) from Arkansas. J. Kansas Ent.Soc., 61(1):126-130.

Brailovsky, H., and L. Torres. 1986. Hemiptera-Heteroptera de México XXXVI. Revision génerica de la familia Tingidae Laporte. An. Inst. Biol. Univ. Nal. Auton. Méx., 56, ser. Zool., (3):869-932 (1985).

Drake, C.J., and J.D. Lattin. 1963. American species of the lacebug genus Acalypta

(Hemiptera: Tingidae). Proc. U.S. Nat. Mus., 115:331-345.

Froeschner, R.C. 1976. Zoogeographic notes on the lace bug genus *Acalypta* Westwood in the Americas with description of a new species from Mexico (Hemiptera: Tingidae). Amer. Midl. Nat., 96(2):257-269.